

Title (en)

CRYSTAL CONTAINING UNSATURATED CARBOXYLIC ACID AMIDE COMPOUND AND METHOD FOR PRODUCING SAME

Title (de)

KRISTALL MIT EINER UNGESÄTTIGTEN CARBONSÄUREAMIDVERBINDUNG UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

CRISTAL CONTENANT UN COMPOSÉ AMIDE D'ACIDE CARBOXYLIQUE INSATURÉ ET SON PROCÉDÉ DE FABRICATION

Publication

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Application

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Priority

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Abstract (en)

[origin: EP2883868A1] Provided is a high-purity crystal of an unsaturated carboxylic acid amide compound which is useful as or for fine chemicals such as pharmaceuticals, agricultural chemicals, polymeric materials, functional materials, and intermediates of them. The crystal includes an unsaturated carboxylic acid amide compound represented by Formula (1) in an amount of 95 percent by area or more. In X-ray diffraction, the crystal exhibits peaks at 2_{β} in the range of 29.0 to 30.0 and in at least one range selected from 6.0 to 8.0, 12.0 to 13.5, and 16.5 to 17.5 and exhibits approximately no peak at 2_{α} in the range of 14.0 to 15.0.

IPC 8 full level

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C07D 235/06 (2006.01); **C07D 235/18** (2006.01); **H01L 21/00** (2006.01)

CPC (source: CN EP KR US)

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C07D 235/18 (2013.01 - CN EP KR US); **C07B 2200/13** (2013.01 - CN)

Citation (search report)

- [IA] DE 3446878 A1 19850711 - CANON KK [JP]
- [IA] ANNE SOPHIE VOISIN-CHIRET ET AL: "Synthesis of new L-ascorbic ferulic acid hybrids", MOLECULES, MOLECULAR DIVERSITY PRESERVATION INTERNATIONAL, BASEL, CH, vol. 12, no. 11, 1 November 2007 (2007-11-01), pages 2533 - 2545, XP008131364, ISSN: 1420-3049, DOI: 10.3390/12112533
- [IA] HEMMERLE H ET AL: "Chlorogenic acid and synthetic chlorogenic acid derivatives: Novel inhibitors of hepatic glucose-6-phosphate translocase", JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, US, vol. 2, no. 40, 17 January 1997 (1997-01-17), pages 137 - 145, XP002078904, ISSN: 0022-2623, DOI: 10.1021/JM9607360
- [IA] GERARDO ULIBARRI ET AL: "Activation of Imidazolides Using Methyl Trifluoromethanesulfonate: A Convenient Method for the Preparation of Hindered Esters and Amides", SYNTHESIS, vol. 1996, no. 11, 1 November 1996 (1996-11-01), STUTTGART, DE., pages 1286 - 1288, XP055236462, ISSN: 0039-7881, DOI: 10.1055/s-1996-4399
- [IA] POPOV I I ET AL: "INVESTIGATIONS OF UNSATURATED AZOLES. 15. SYNTHESIS AND REACTIONS OF ACYLATED BENZIMIDAZOLES", CHEMISTRY OF HETEROCYCLIC COMPOUNDS, SPRINGER NEW YORK LLC, US, vol. 33, no. 3, 1 January 1997 (1997-01-01), pages 293 - 299, XP000974045, ISSN: 0009-3122, DOI: 10.1007/BF02253109
- [IA] GIOVANNA SPERANZA ET AL: "The Michael Reaction of N-Cinnamoylazoles with Phenols. A Simple Synthesis of 4-Arylchroman-2-ones and 1-Arylbenzo[f]chroman-3-ones", SYNTHESIS, vol. 2000, no. 01, 1 January 2000 (2000-01-01), STUTTGART, DE., pages 123 - 126, XP055236464, ISSN: 0039-7881, DOI: 10.1055/s-2000-6233
- [IA] TETSUHIRO NEMOTO ET AL: "Catalytic Asymmetric Synthesis of [alpha],[beta]-Epoxy Esters, Aldehydes, Amides, and [gamma],[delta]-Epoxy [beta]-Keto Esters: Unique Reactivity of [alpha],[beta]-Unsaturated Carboxylic Acid Imidazolides", JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol. 123, no. 38, 1 September 2001 (2001-09-01), US, pages 9474 - 9475, XP055236466, ISSN: 0002-7863, DOI: 10.1021/ja0164879
- [IA] COSTA M A ET AL: "Characterization in vitro and in vivo of the putative multigene 4-coumarate:CoA ligase network in Arabidopsis: syringyl lignin and sinapate/sinapyl alcohol derivative formation", PHYTOCHEMISTRY, PERGAMON PRESS, GB, vol. 66, no. 17, 1 September 2005 (2005-09-01), pages 2072 - 2091, XP027726720, ISSN: 0031-9422, [retrieved on 20050901]
- [IA] STEPHEN T HELLER ET AL: "On the reactivity of imidazole carbamates and ureas and their use as esterification and amidation reagents", TETRAHEDRON, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 67, no. 46, 15 September 2011 (2011-09-15), pages 8851 - 8859, XP028311321, ISSN: 0040-4020, [retrieved on 20110922], DOI: 10.1016/J.TET.2011.09.057
- [IA] D. VAN DEYNSE ET AL: "Inhibition or initiation of a radical polymerization reaction by an ultraviolet-induced enzymatic process", BIOTECHNOLOGY AND BIOENGINEERING., vol. 29, no. 4, 1 March 1987 (1987-03-01), US, pages 403 - 413, XP055236647, ISSN: 0006-3592, DOI: 10.1002/bit.260290402
- See references of WO 2014024843A1

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